查询2N7369JAN供应商

Microsemi LAWRENCE

TECHNICAL DATA

# PNP HIGH POWER SILICON TRANSISTOR

***Qualified per MIL-PRF-19500/621***

| *Devices* | *Qualified Level* |
|---|---|
| **2N7369** | **JAN<br>JANTX<br>JANTXV** |

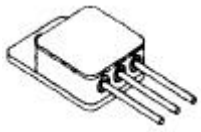
**MAXIMUM RATINGS**

| Ratings | Symbol | Value | Units |
|---|---|---|---|
| Collector-Emitter Voltage | $V_{CEO}$ | 80 | Vdc |
| Collector-Base Voltage | $V_{CBO}$ | 80 | Vdc |
| Emitter-Base Voltage | $V_{EBO}$ | 7.0 | Vdc |
| Base Current | $I_B$ | 4.0 | Adc |
| Collector Current | $I_C$ | 10 | Adc |
| Total Power Dissipation @ $T_C = +25^0C$ (1) | $P_T$ | 115 | W |
| Operating & Storage Junction Temperature Range | $T_J$, $T_{stg}$ | -65 to +200 | $^0C$ |

**THERMAL CHARACTERISTICS**

| Characteristics | Symbol | Max. | Unit |
|---|---|---|---|
| Thermal Resistance, Junction-to-Case | $R_{\theta JC}$ | 1.5 | $^0C/W$ |

1) Derate linearly 0.657 $W/^0C$ for $T_C > 25^0C$



TO-254*

*See appendix A for package outline

**ELECTRICAL CHARACTERISTICS ($T_C = 25^0C$ unless otherwise noted)**

| Characteristics | Symbol | Min. | Max. | Unit |
|---|---|---|---|---|
| **OFF CHARACTERISTICS** | | | | |
| Collector-Emitter Breakdown Voltage<br>$I_C$ = 0.2 Adc | $V_{CEO(sus)}$ | 80 | | Vdc |
| Collector-Emitter Cutoff Current<br>$V_{CE}$ = 70 Vdc | $I_{CES}$ | | 5.0 | mAdc |
| Collector-Emitter Cutoff Current<br>$V_{CE}$ = 80 Vdc, $V_{BE}$ = 1.5 Vdc | $I_{CEX}$ | | 5.0 | mAdc |
| Emitter-Base Cutoff Current<br>$V_{EB}$ = 7.0 Vdc | $I_{EBO}$ | | 5.0 | mAdc |

**ELECTRICAL CHARACTERISTICS (con't)**

| Characteristics | Symbol | Min. | Max. | Unit |
|---|---|---|---|---|
| **ON CHARACTERISTICS** (2) | | | | |
| Forward-Current Transfer Ratio | | | | |
| $I_C$ = 1.0 Adc, $V_{CE}$ = 2.0 Vdc | $h_{FE}$ | 50 | 175 | |
| $I_C$ = 3.0 Adc, $V_{CE}$ = 2.0 Vdc | | 30 | 140 | |
| Collector-Emitter Saturation Voltage | | | | |
| $I_C$ = 5.0 Adc, $I_B$ = 0.5 Adc | $V_{CE(sat)}$ | | 1.0 | Vdc |
| Base-Emitter Saturation Voltage | | | | |
| $I_C$ = 5.0 Adc, $I_B$ = 0.5 Adc | $V_{BE(sat)}$ | | 1.5 | Vdc |
| **DYNAMIC CHARACTERISTICS** | | | | |
| Magnitude of Common Emitter Small-Signal Short-Circuit Forward Current Transfer Ratio | | | | |
| $I_C$ = 0.5 Adc, $V_{CE}$ = 10 Vdc, f = 1.0 MHz | $\lvert h_{fe} \rvert$ | 4.0 | 20 | |
| Output Capacitance | | | | |
| $V_{CB}$ =10 Vdc, $_E$ = 0, 100 kHz ≤ f ≤ 1.0 MHz | $C_{obo}$ | | 500 | pF |

**SAFE OPERATING AREA**

**DC Tests**

$T_C$ = +25$^0$C, 1 Cycle, t ≥ 1.0 s

**Test 1**

$V_{CE}$ = 11.5 Vdc, $I_C$ = 10 Adc

**Test 2**

$V_{CE}$ = 45 Vdc, $I_C$ = 2.5 Adc

**Test 3**

$V_{CE}$ = 60 Vdc, $I_C$ = 0.9 Adc

(2) Pulse Test: Pulse Width = 300μs, Duty Cycle ≤ 2.0%.